Listing of the Claims:

1-16. (Cancelled)

17. (Previously Presented) A transgenic non-human animal having germ and/or somatic cells which comprise a DNA construct comprising a cDNA molecule coding for N- and C-terminally truncated tau molecules, wherein:

the cDNA molecule has truncated at least 30 nucleotides downstream of the start codon and truncated at least the 30 nucleotides upstream of the stop codon of the full length tau cDNA sequence coding for 4-repeat and 3-repeat tau protein;

the cDNA molecule comprises SEQ ID No. 9; and

the DNA construct encodes a protein, which has neurofibrillary (NF) pathology producing activity when expressed in brain cells of animals.

18. (Previously Presented) The transgenic non-human animal of claim 17, further defined as an animal with germ and somatic cells transiently or stably expressing said DNA construct and exhibiting NF pathology in the brain.

19. (Previously Presented) The transgenic non-human animal of claim 17, further defined as a rat.

20. (Previously Presented) The transgenic non-human animal of claim 17, wherein the protein encoded by said DNA molecules is expressed in the brain.

21. (Previously Presented) The transgenic non-human animal of claim 17, further defined as exhibiting NF pathology and having a genetic background allowing the induction of risk factors associated with Alzheimer's disease.

22. (Previously Presented) The transgenic non-human animal of claim 21, further defined as inducible to exhibit hypertension.

23. (Previously Presented) The transgenic non-human animal of claim 21, further defined as inducible to exhibit diabetes.

24. (Previously Presented) The transgenic non-human animal of claim 21, further defined as inducible to exhibit hypercholesterolemia.

25. (Previously Presented) A screening assay system and validation system for a candidate for the treatment, prevention, and/or diagnosis of a tauopathy comprising:

administering the candidate to a non-human transgenic animal of claim 17;

evaluating the candidate by:

detecting changes of neurofibrillar pathology in said animal;

measuring of neurobehavioral changes in said animal;

measuring of the cognitive score in said animal;

validating the candidate for the treatment and prevention of the tauopathy;

validating diagnostic markers and probes for the detection the tauopathy; and

validating the candidate for the treatment of hypertension, diabetes, dislipidaemia and/or hypercholesterolemia in combination with the tauopathy.

26. (Previously Presented) The system of claim 25, wherein the tauopathy is Alzheimer's disease.

27. (Previously Presented) The system of claim 25, further defined as a system for identifying new drug targets in tauopathies and related neurodegeneration processes.

28. (Previously Presented) A method comprising assaying the efficacy of substances or therapies using an animal according to claim 17.

29. (Previously Presented) The method of claim 28, further defined as a method for assaying the efficacy of neurofibrillary pathology reducing therapies.

30. (Previously Presented) The method of claim 28, wherein said substances or therapies are for neurodegenerative diseases.

31. (Previously Presented) The method of claim 30, wherein said substances or therapies are for a tauopathy.

32. (Previously Presented) The method of claim 31, wherein said substances or therapies are for a neurodegenerative disease accompanied by neurofibrillary pathology.

33. (Previously Presented) The method of claim 32, wherein said substances or therapies are for Alzheimer's disease.

34. (Previously Presented) The transgenic non-human animal of claim 17, further defined as a mouse.

35. (Previously Presented) The transgenic non-human animal of claim 17, further defined as a rabbit.

36. (Previously Presented) The transgenic non-human animal of claim 17, further defined as a hamster.

37. (Previously Presented) A transgenic rat having germ and somatic cells which comprise a DNA construct comprising a cDNA molecule coding for N- and C-terminally truncated tau molecules operably linked to a promoter functional in mammalian cells, wherein:

the cDNA molecule has truncated at least 30 nucleotides downstream of the start codon and truncated at least the 30 nucleotides upstream of the stop codon of the full length tau cDNA sequence coding for 4-repeat and 3-repeat tau protein;

the cDNA molecule comprises SEQ ID No. 9; and

the DNA construct encodes a protein, which has neurofibrillary (NF) pathology producing activity when expressed in brain cells of rats.